

Notice of Allowability

Application No.

10/642,939

Examiner

Ann T. Hoang

Applicant(s)

KELLERMAN ET AL.

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12-21-2005.
2. ☒ The allowed claim(s) is/are 1-47.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date attached
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in telephone interviews with Gregory J. Adams and John Beinhardt on Friday, March 3, 2006 and Monday, March 06, 2006.

The application has been amended as follows:

In claim 1, line 14, following "area" the words -- that is entirely electrically insulative-- have been inserted.

In claim 42, line 5, following "defining a" the words --protrusion contact area that is entirely electrically insulative, the plurality of protrusions further defining a-- have been inserted.

REASONS FOR ALLOWANCE

2. The following is an examiner's statement of reasons for allowance:

Regarding claims 1-41, prior art fails to teach a protrusion contact area that is entirely electrically insulative, in combination with the other limitations in the claims.

A search of the prior art revealed Xu et al. (US 5,841,624), which discloses a plurality of electrically conductive protrusions coated with an electrically insulative material, wherein the insulative material on the top surface of the protrusions is etched

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off so that a conductive surface of the protrusions contacts a substrate placed thereon.

The protrusions as disclosed by Xu et al. would be interpreted to be electrically insulative protrusions, since part of the protrusions are coated in an insulative material. However, in light of the amendment made to claim 1 above, the reference fails to meet the claim limitations since Xu et al. does not disclose a protrusion contact area that is entirely electrically insulative.

Anderson et al. (US 5,583,736) discloses a plurality of electrically insulative protrusions and a protrusion contact area that is entirely electrically insulative. However, use of the electrically insulative protrusions of Anderson et al. as the protrusions in the electrostatic chuck of the base reference, Logan et al. (US 5,155,652), would render the apparatus of Logan et al. inoperable, since Logan relies on conductive protrusions of alternating polarity in order to securely clamp a substrate to the chuck. Additionally, Logan et al. discloses that insulated protrusions are undesirable for the apparatus because the materials utilized for the electrical insulators have radically different thermal expansion characteristics than other materials in the apparatus, therefore introducing varying temperature cycles and causing separation between the dissimilar materials.

Regarding claims 42-47, prior art fails to teach a protrusion contact area that is entirely electrically insulative, in combination with the other limitations in the claims. This limitation corresponds to that of claim 1 discussed above; see above reasons for allowance on claim 1.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ann T. Hoang, whose telephone number is 571-272-2724. The examiner can normally be reached Monday through Friday, 8:00 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus, can be reached at 571-272-2058. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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PHUONG T. VU
PRIMARY EXAMINER